

REMARKS

The application has been amended to place it in condition for allowance at the time of the next Official Action.

Claims status

Claims 1-18 are pending in the application.

35 USC 103 rejection

Claims 1-4 and 8-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (US 6051340) in view of Kadoguchi (JP 11-354110, machine translation). That rejection is respectfully traversed.

Claim 1 is amended and recites that the electrode comprises an electroconductive metal foil layer and active material layers formed on each side of the metal foil layer. Support for this amendment appears in, for example, paragraph [0081] of the published application (US 2009/0191459) and Figure 5.

The claimed electrode has a pair of active material layers arranged on each side of the electroconductive metal foil layer, i.e., current collector. An output terminal is attached to one of the surfaces of the electrode. The output terminal is located at a position which corresponds to a position where the active material layer exists, in a plan view of the electrode.

A thorough review of the cited references reveals that none of the cited references teaches or suggests the claimed output terminal that is positioned on the active material layer.

In particular, contrary to the claimed invention, Kadoguchi discloses that the tab 6 is attached on the non-coated region of the current collector. This disclosure leads one of ordinary skill in the art away from the claimed electrode that has an output terminal positioned on the active material layer.

Moreover, the patentability of the claimed invention is more apparent from the following discussion.

In the field of secondary batteries, it is a conventional technique to put an electrode tab directly on the non-coated region, i.e., the region where an active material layer is not present, of the current collector, as disclosed in Kadoguchi.

Contrary to this, the inventors of the present invention have found the electrode tab can be put on the active material layer as far as the active material layer has sufficient electroconductivity (see paragraph [0019]).

Since Kawakami does not specifically disclose that the surface of the active material layer has sufficient electroconductivity, it would not be obvious for a person of ordinary skill in the art to achieve sufficient electroconductivity by putting the electrode tab of Kadoguchi on the surface of the active material layer of Kawakami.

Further, as set forth above, Kadoguchi teaches away from the surface of the active material layer and instead uses the non-coated (non-active material) region.

Accordingly, claim 1 and the claims that depend therefrom are believed to be patentable over the proposed combination of references.

Claims 16 and 17 have been rewritten in independent form to clarify that these claims are process claims and not product-by-process claims.

Claims 16-18 are directed to a process of producing the electrodes as recited in claims 1 and 3. The process recited in claims 16-18 are not described in the cited references. It is therefore believed that these process claims are not obvious over the cited references.

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami in view of Kadoguchi and further in view of Shackle et al. US 4,925,751 and Koksbang et al. US 5,368,959. That rejection is respectfully traversed.

Shackle and Koksbang are only cited with respect to features of dependent claim 5. Shackle et al. US 4,925,751 and Koksbang do not overcome the shortcomings of Kawakami in view of Kadoguchi set forth above with respect to claim 1. Since claim 5 depends from claim 1 and further defines the invention, claim 5 is believed to be patentable at least for depending from an allowable independent claim.

Claims 6 and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami in view of Kadoguchi and further in view of Tanjo et al. US Publication No. 2002/0028380. That rejection is respectfully traversed.

Tanjo is only cited with respect to features of dependent claims 6 and 7. Tanjo does not overcome the shortcomings of Kawakami in view of Kadoguchi set forth above with respect to claim 1. Since claims 6 and 7 depend from claim 1 and further define the invention, these claims are believed to be patentable at least for depending from an allowable independent claim.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Liam McDowell/  
Liam McDowell, Reg. No. 44,231  
209 Madison Street, Suite 500  
Alexandria, VA 22314  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

LM/lrs